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Attorney Docket No. YOR920000808US2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Patent Application**

Applicant(s): D. Yuk et al.  
Docket No.: YOR920000808US2  
Serial No.: 09/910,985  
Filing Date: July 23, 2001  
Group: 2644  
Examiner: Unassigned

Title: Unsupervised Incremental Adaptation Using  
Maximum Likelihood Spectral Transformation

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Signature:  Date: December 4, 2002

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants' attorney wishes to bring to the attention of the Patent and Trademark Office the following documents listed on the accompanying Form PTO-1449. A copy of each listed document is enclosed.

1. C.J. Leggetter et al. entitled "Speaker Adaptation of Continuous Density HMMs Using Multivariate Linear Regression," *International Conference on Spoken Language Processing*, pp. 451-454 (1994).
2. D. Yuk et al. entitled "Adaptation to Environment and Speaker Using Maximum Likelihood Neural Networks," *Eurospeech*, pp. 2531-2534 (September 1999).
3. L.E. Baum entitled "An Inequality and Associated Maximization Technique in Statistical Estimation for Probabilistic Functions of Markov Processes," *Inequalities*, Chapter 3, pp. 1-8 (1972).
4. G.D. Forney, Jr. entitled "The Viterbi Algorithm," *Proceedings of the IEEE*, Vol. 61, No. 3, pp. 268-278 (March 1973).
5. S. Furui entitled "Cepstral Analysis Technique for Automatic Speaker Verification," *IEEE Transactions on Acoustics, Speech and Signal Processing*, ASSP-29(2), pp. 254-272, September 1996.

It is believed that there is no fee due in conjunction with the filing of this Information Disclosure Statement. In the event of non-payment or improper payment of a required fee, the Commissioner is authorized to charge or to credit **International Business Machines Corporation Deposit Account No. 50-0510** as required to correct the error.

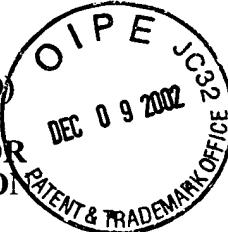
The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, or as an admission that the information cited is considered to be material to patentability, or as a representation that no other material information exists.

Respectfully submitted,



Date: December 4, 2002

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**FORM PTO-1449 (MODIFIED)****LIST OF PUBLICATIONS FOR  
APPLICANT'S INFORMATION  
DISCLOSURE STATEMENT**

Applicant(s): D. Yuk et al.  
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**U.S. PATENT DOCUMENTS**

EXAMINER	INITIAL	DOCUMENT NO.	DATE	NAME	CLASS/SUBCLASS	FILING DATE	IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

EXAMINER	INITIAL	DOCUMENT NO.	DATE	COUNTRY	CLASS/SUBCLASS	TRANSLATION	YES	NO

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**OTHER DOCUMENTS**Technology Center 2600

EXAMINER	INITIAL	REF NO.	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.

- 1. C.J. Leggetter et al. entitled "Speaker Adaptation of Continuous Density HMMs Using Multivariate Linear Regression," *International Conference on Spoken Language Processing*, pp. 451-454 (1994).
- 2. D. Yuk et al. entitled "Adaptation to Environment and Speaker Using Maximum Likelihood Neural Networks," *Eurospeech*, pp. 2531-2534 (September 1999).
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Examiner

Date Considered

**Examiner:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.